



DSpace 7: Coming Soon to a DSpace Near You



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1. Quick intro to DSpace
2. What's Exciting about DSpace 7
 - a. New look
 - b. New features
 - c. Next-generation repository practices
3. When will it be released?
4. Where to learn more
5. How to help

The Idea

- ★ Open digital object repository system
- ★ Used to capture, organize, and provide access to all types of digital content
- ★ Completely free to use, modify and integrate
- ★ Useful out-of-the-box but also highly customizable
- ★ Created by and for libraries (also used by archives, consortiums, and commercial companies)



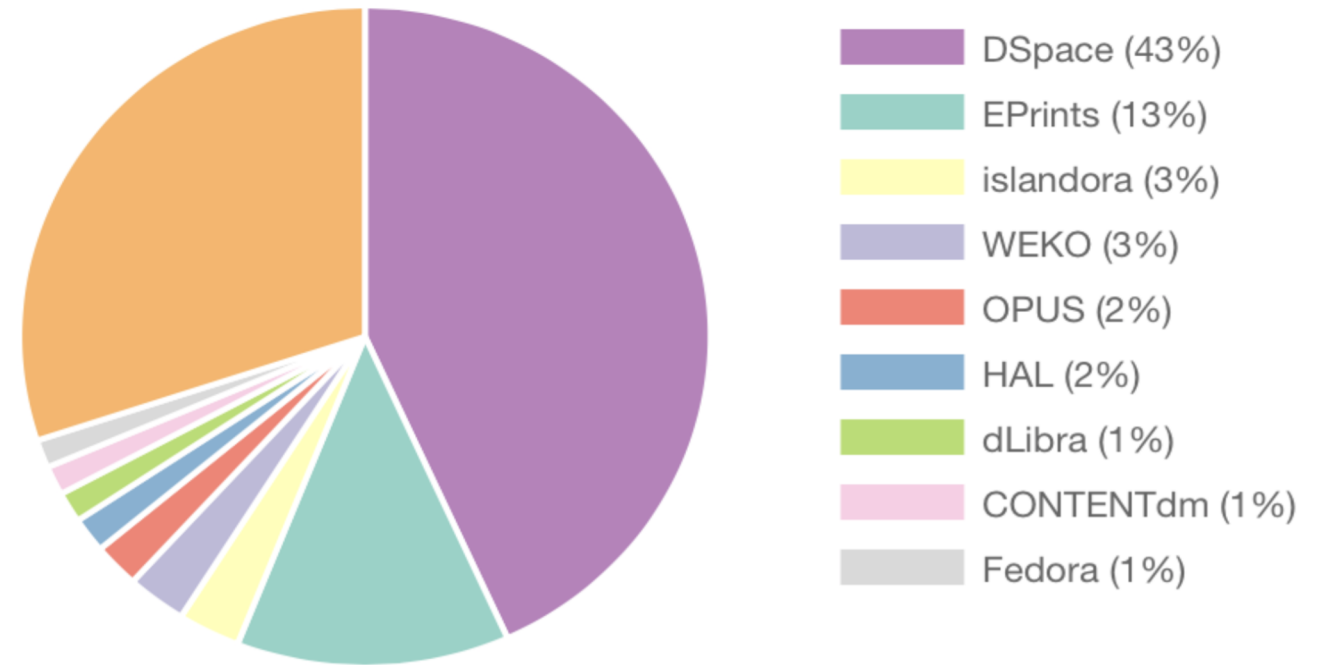
DSPACE

Est. 2002

The most popular repository software globally

- ★ 120+ countries
- ★ 20+ languages
- ★ 74 code contributors to DSpace 6.0
- ★ 18 Registered Service Providers in 11 countries

Software Platforms Overview



most widely adopted for repositories
worldwide

(according to [openoar.org](https://www.openoar.org/))

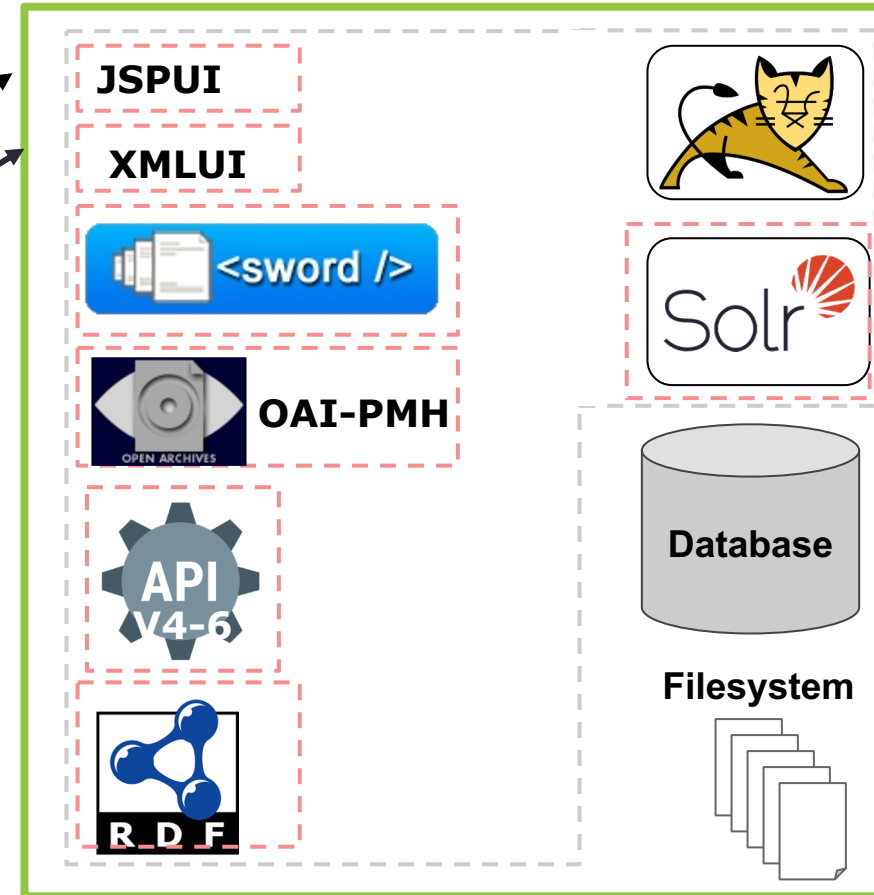
- ★ Single (Angular) User Interface
- ★ Fully-featured REST API
- ★ Configurable Entities
- ★ Align with Next Generation Repository recommendations
- ★ **Same backend as DSpace 6.x**

DSpace Architecture (v6 and below)

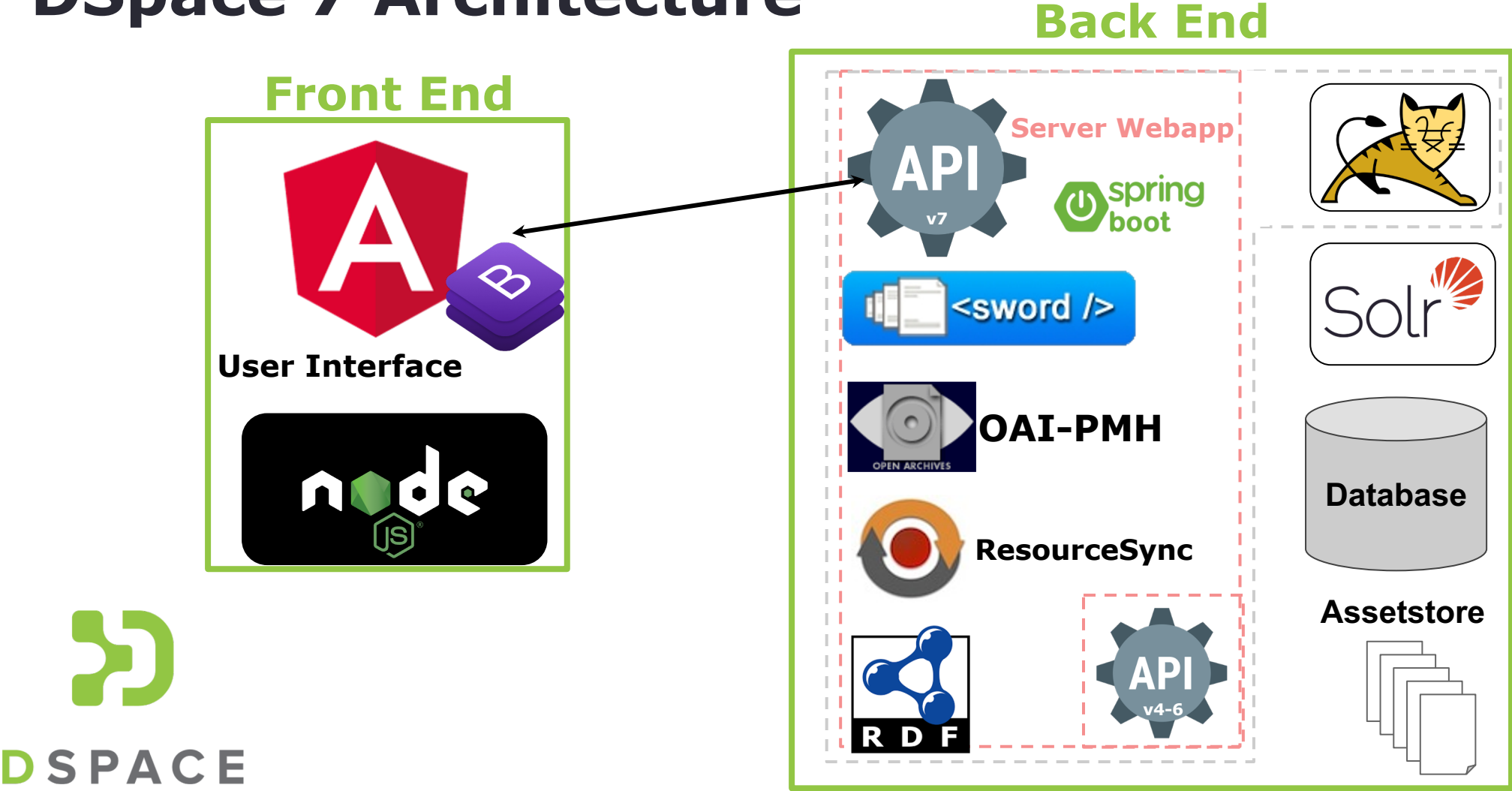
Front & Back End (Java)

Two User Interfaces

- JSPUI (est 2002)
- XMLUI (est 2008)



DSpace 7 Architecture



New User Interface



Frontend (UI) is themeable
by a Bootstrap designer



Backend is now one webapp

- Easier to install, configure
- Less resource intensive

Browse By
Options

DSpace 7

DSpace is the world leading open source repository platform that enables organisations to:

- easily ingest documents, audio, video, datasets and their corresponding Dublin Core metadata
- open up this content to local and global audiences, thanks to the OAI-PMH interface and Google Scholar optimizations
- issue permanent urls and trustworthy identifiers, including optional integrations with handle.net and DataCite DOI

Join an international community of [leading institutions using DSpace](#).

Change
Language

Click to
login

Communities in DSpace

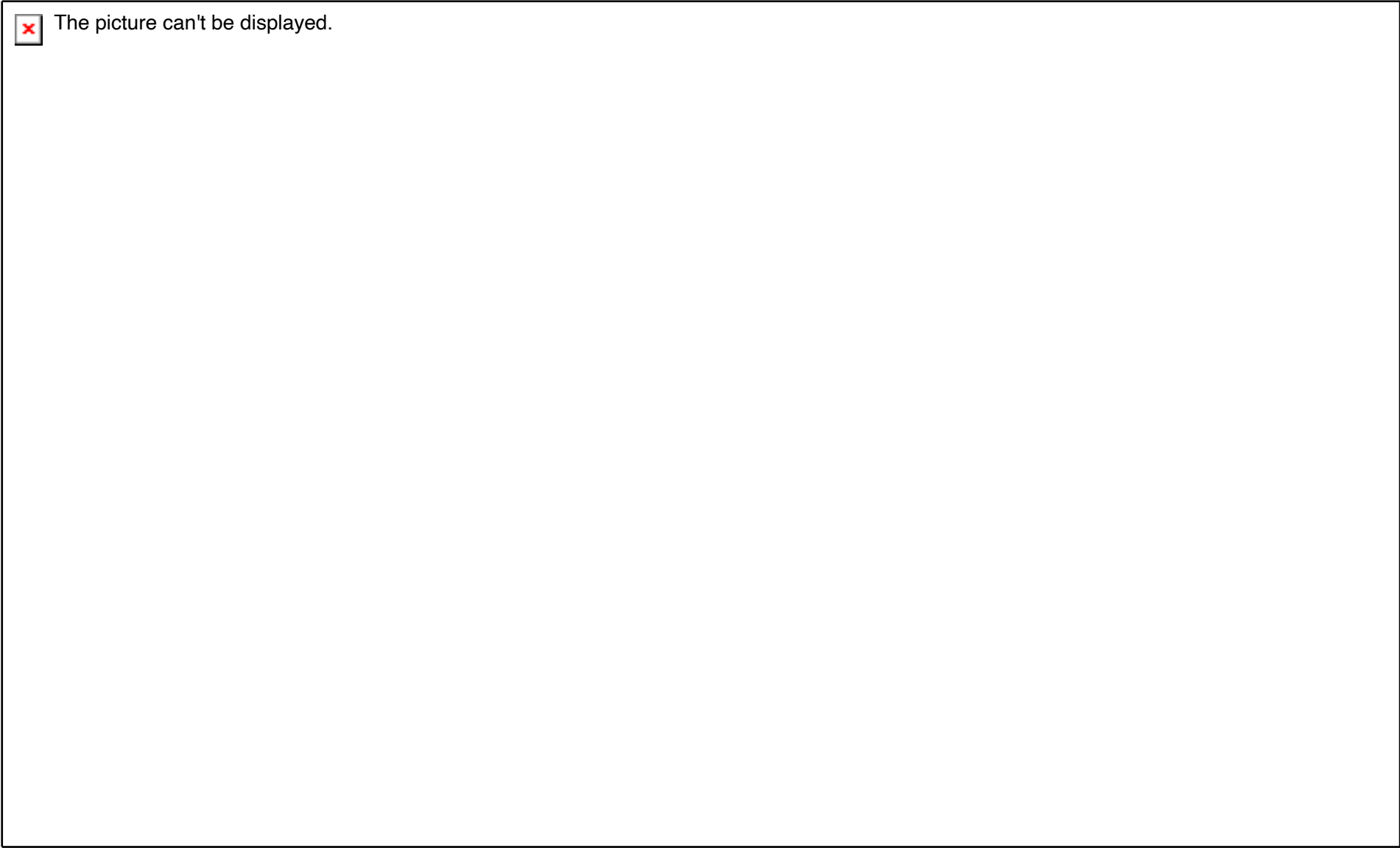
Select a community to browse its collections.

Now showing 1 - 5 of 5

[Compound Journals](#)

[DataSet](#)

[Publications](#)





Admin Demo: Create Community

- ★ One-page (scrollable) form
- ★ Pages are now (collapsible) sections
- ★ Optionally, multiple fields per row
- ★ Drag & Drop upload
- ★ MyDSpace is searchable / filterable



The picture can't be displayed.

REST API

- ★ Fully-featured and robust REST API
- ★ Makes all DSpace data reusable
- ★ The engine for integrations and open data sharing

REST API (HAL Browser)

Explorer





















Go!

Custom Request Headers

Properties

```
{
  "dSPACEURL": "https://dspace7.4science.it/terry",
  "dSPACEName": "DSpace7 Terry provided by 4Science for OR2018",
  "dSPACERest": "https://dspace7.4science.it/terry",
  "type": "root"
}
```

Links

rel	title	name / index	docs	GET	NON-GET
authn					
authorities					
bitstreamformats					
bitstreams					
browse					
claimedtasks					
collections					
communities					
discover					
persons					

Inspector

Response Headers

200 200

```
pragma: no-cache
date: Fri, 01 Jun 2018 20:40:57 GMT
strict-transport-security: max-age=31536000 ; includeSubDomains, max-age=60
x-content-type-options: nosniff
server: Apache/2.4.18 (Ubuntu)
x-frame-options: DENY
content-type: application/hal+json;charset=UTF-8
access-control-allow-origin: *
access-control-expose-headers: Authorization, expires, Location
cache-control: no-cache, no-store, max-age=0, must-revalidate
transfer-encoding: chunked
connection: Keep-Alive
keep-alive: timeout=5, max=94
x-xss-protection: 1; mode=block
expires: 0
```

Response Body

```
{
  "dSPACEURL": "https://dspace7.4science.it/terry",
  "dSPACEName": "DSpace7 Terry provided by 4Science for OR2018",
  "dSPACERest": "https://dspace7.4science.it/terry",
  "type": "root",
  "_links": {
    "authn": {
      "href": "https://dspace7.4science.it/terry/api/authn"
    },
    "authorities": {
      "href": "https://dspace7.4science.it/terry/api/integration/authorities"
    },
    "bitstreamformats": {
      "href": "https://dspace7.4science.it/terry/api/core/bitstreamformats"
    },
    "bitstreams": {
      "href": "https://dspace7.4science.it/terry/api/core/bitstreams"
    }
  }
}
```

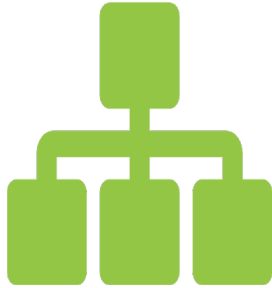
Configurable Entities

In DSpace, an Entity is...

- ★ An Item
- ★ With a specific defined “type” (name)
- ★ With relationship(s) to other Entities

Entities are *optional*. May continue to just use (generic) Items

Entities are *100% configurable*. Two options available at release & others can be adapted/extended



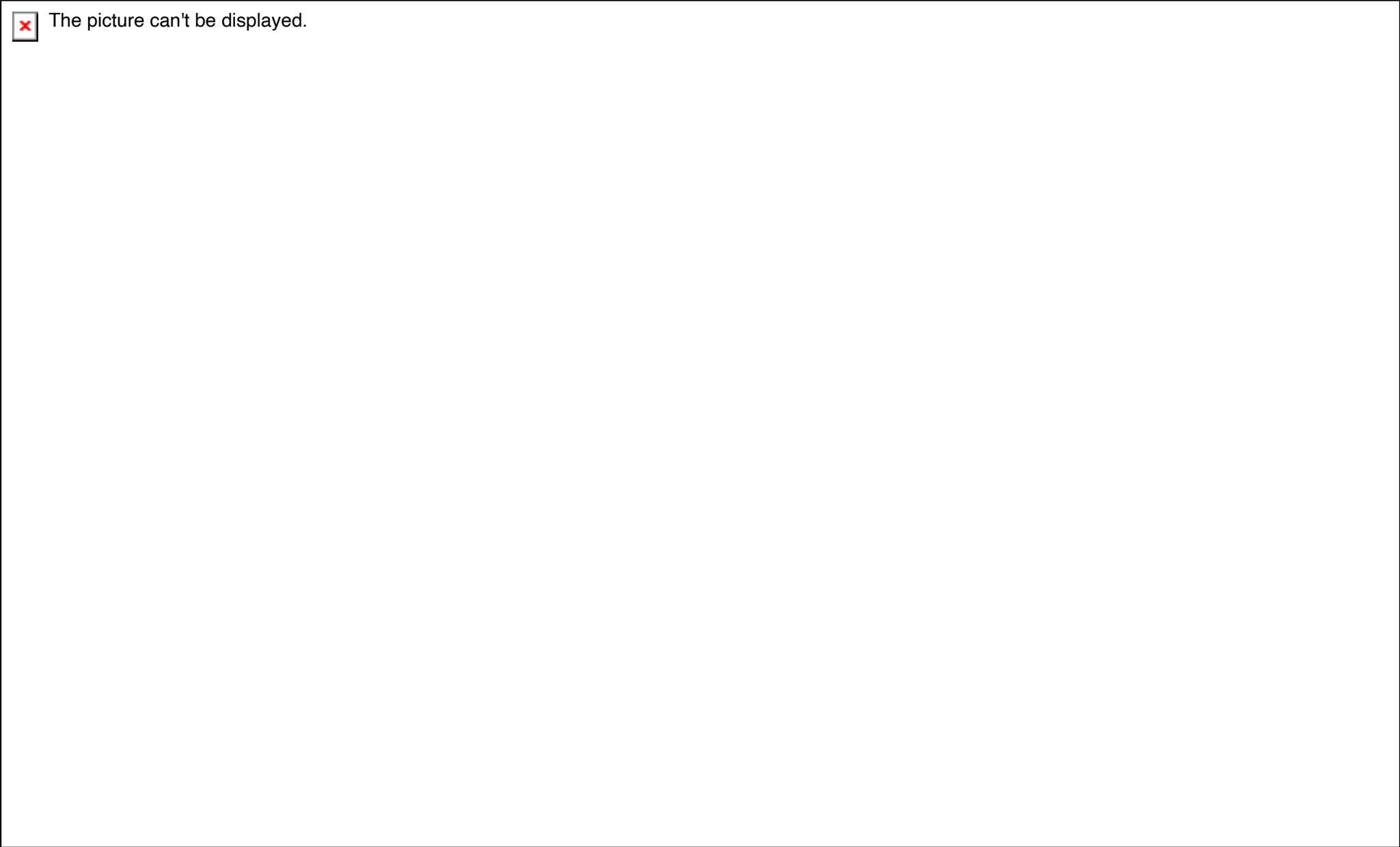
Entities related to **Journal hierarchy**

- Journal
- Volume
- Issue
- Publication* (Article)



Entities related to **Author Profiles / Research**

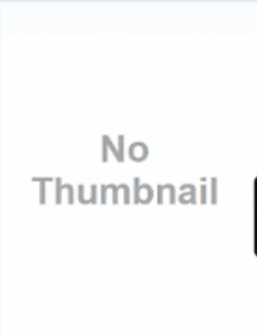
- Publication*
- Person
- Project
- OrgUnit





All of DSpace ▾ Statistics

🔍 🌐 Log In ▾



Publication:
Assessing dengue vaccination impact: Model challenges and future directions

Director of the Institute of
Vector-Borne Disease

[Simmons, Cameron](#)

Date

2016-08-31

Abstract

In response to the sharp rise in the global burden caused by dengue virus (DENV) over the last few decades, the WHO has set out three specific key objectives in its disease control strategy: (i) to estimate the true burden of dengue by 2015; (ii) a reduction in dengue mortality by at least 50% by 2020 (used as a baseline); and (iii) a reduction in dengue morbidity by at least 25% by 2020. Although various elements will all play crucial parts in achieving this goal, from diagnosis and case management to integrated surveillance and outbreak response, sustainable vector control, vaccine implementation and finally operational and implementation research, it seems clear that new tools (e.g. a safe and effective vaccine and/or effective vector control) are key to success. The first dengue vaccine was licensed in December 2015, Dengvaxia® (CYD-TDV) developed by Sanofi Pasteur. The WHO has provided guidance on the use of CYD-TDV in endemic countries, for which there are a variety of considerations beyond the risk-benefit evaluation done by regulatory authorities, including public health impact and cost-effectiveness. Population-level vaccine impact

All of DSpace ▾ Statistics



Person:
Simmons, Cameron

Email Address

Cameron.Simmons@monash.edu

ORCID

0000-0002-9039-7392

Birth Date

1994-10-22

Job Title

Director of the Institute of Vector-Borne Disease

Last Name

Simmons

First Name

Cameron

Full item page

Articles by this author



Filters

Author ▾

Date ▲

1950

2018

Search DSpace ▾

Search

Search Results

Now showing 1 - 10 of 190

Publication

Memory T cells established by seasonal human influenza A infection cross-react with avian influenza A (H5N1) in healthy individuals

(2008-10-01) Simmons, Cameron

The threat of avian influenza A (H5N1) infection in humans remains a global health concern. Current influenza

Deep Dive into Configurable Entities

View slides and recordings for presentations from Open Repositories 2019:

<https://wiki.lyrasis.org/display/DSPACE/DSpace+7+at+OR2019#DSpace7atOR2019-DSpace7Presentations>

A Next Generation Repository

Best practices for enhanced interoperability

Configurable Entities: expands the item concept and includes additional use cases

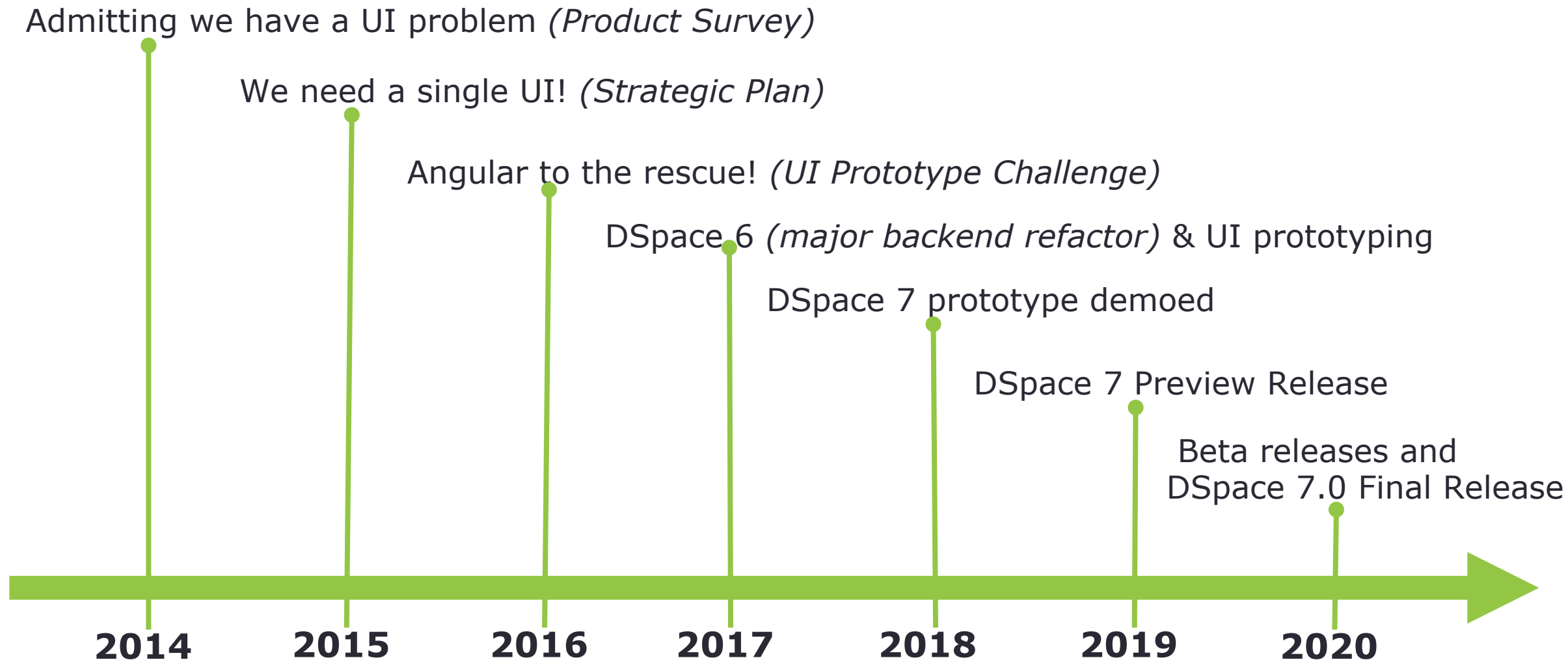
ResourceSync: Modern synchronization framework for the web

Signposting: the scholarly web made more machine-readable



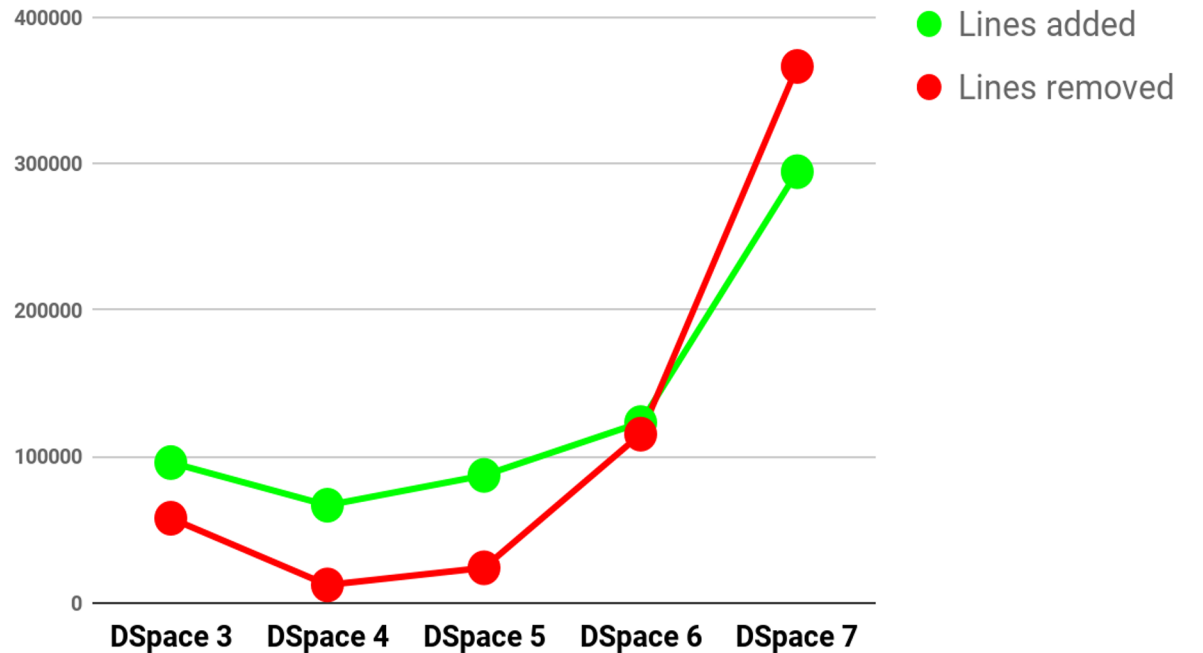
The Road to DSpace 7 Release

A DSpace 7 Timeline



- Largest Release in DSpace History
- **\$0 Grant Funding**
- Fully community-driven: decisions, funding, development
- Test Driven Development
 - Finds & Squashes bugs early
 - New development processes take time

Lines of Code Changed per Major Release



Code Contributors



- ★ **Beta 1 (released March 3, 2020):** Security, Performance and Browse updates
- ★ **Beta 2 (released April 20, 2020):** Authentication / Authorization, Administrative Editing, Item Versioning
- ★ ***Planning Sprint:*** focus on testing, evaluating goals for Beta 3-5
- ★ **Beta 3 (goal: June* 2020):** Account Profiles, Submission/Workflow enhancements, Administrative tools
- ★ **Beta 4 (goal: July* 2020):** SEO enhancements, Theming enhancements, Batch processing, Solr-based Statistics, GDPR
- ★ **Beta 5 (goal: Aug* 2020, if necessary):** optional, general bug fixing & cleanup
- ★ **7.0 Release:** Production-ready release of 7.0. Roughly estimated at 1-2 months after last Beta

*current goals

Where to Learn More and How to Contribute

Try it out now!

DSpace 7 UI demo

<https://dspace7-demo.atmire.com/>

(uses the REST API demo as backend)

DSpace 7 REST API demo:

<https://dspace7.4science.cloud/server/>

Run locally via Docker:

<https://dspace-labs.github.io/DSpace-Docker-Images/>

Learn More

- ★ Learn about Beta Release 2 (with short videos!):
<https://wiki.lyrasis.org/display/DSDOC7x/Release+Notes>
- ★ Read the latest updates about the beta release goals:
<https://duraspace.org/dspace/dspace-7/>
- ★ Sign up for Community lists for the latest information:
<https://duraspace.org/dspace/community/>

Join [DSpace 7 Working Group](#)

- ★ Meet every Thursday
- ★ Help test or review Pull Requests!

Join [DSpace Community Advisory Team \(DCAT\)](#)

- ★ Repository Manager interest group
- ★ Advises on community needs

Become a Member

- ★ New & increased memberships keep DSpace 7 release momentum
- ★ Members have a role in DSpace Governance



Thank you!

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DSpace 7 news & resources on dspace.org